

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A film deposition apparatus comprising:
 - a stock chamber for loading or unloading a substrate;
 - a transferring chamber including a first mechanism for transferring said substrate; and
 - a liquid phase film deposition chamber connected to said transferring chamber through a gate,

wherein said liquid phase film deposition chamber is provided with a second mechanism for oxidizing an element belonging to Group 1 or 2 of the periodic table,

wherein said liquid phase film deposition chamber is provided with a third mechanism for pressurizing with an inert atmosphere,

wherein said liquid phase film deposition chamber is provided with a forth mechanism for supplying an organic material including solvent,

wherein said liquid phase film deposition chamber is filled with an inert gas during film deposition process,

wherein said second mechanism includes an oxidization cell having a lid and an oxygen gettering agent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

2. (Currently Amended) A film deposition apparatus according to claim 1,
wherein an inside of said transferring chamber is kept under a reduced pressure and said
liquid phase film deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric
pressure or in a pressurized state.

3. (Original) A film deposition apparatus according to claim 1,
wherein said transferring chamber is connected to a calcining chamber through a gate, and
said calcining chamber is provided with a mechanism for turning said substrate upside down.

4. (Currently Amended) A film deposition apparatus comprising:
a stock chamber for loading or unloading a substrate;
a transferring chamber including a first mechanism for transferring the substrate; and
a liquid phase film deposition chamber connected to said transferring chamber through a
gate,
wherein said liquid phase film deposition chamber is provided with, via a piping, a second
mechanism for oxidizing an element belonging to Group 1 or 2 of the periodic table,
wherein said liquid phase film deposition chamber is provided with a third mechanism for
pressurizing with an inert atmosphere,
wherein said liquid phase film deposition chamber is provided with a forth mechanism for
supplying an organic material including solvent,
wherein said liquid phase film deposition chamber is filled with an inert gas during film
deposition process,

wherein said second mechanism includes an oxidization cell having a lid and an oxygen gettering agent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

5. (Currently Amended) A film deposition apparatus according to claim 4,

wherein an inside of said transferring chamber is kept under a reduced pressure and said liquid phase film deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric pressure or in a pressurized state.

6. (Original) A film deposition apparatus according to claim 4,

wherein said transferring chamber is connected to a calcining chamber through a gate, and said calcining chamber is provided with a mechanism for turning said substrate upside down.

7. (Currently Amended) A film deposition apparatus comprising:

a stock chamber for loading or unloading a substrate;

two transferring chambers each connected to said stock chamber through a gate;

a vapor phase film deposition chamber connected to one of said two transferring chambers through a gate; and

a liquid phase film deposition chamber connected to another said transferring chamber through a gate,

wherein said liquid phase film deposition chamber is provided with a first mechanism for pressurizing with an inert atmosphere,

wherein said liquid phase film deposition chamber is filled with an inert gas during film deposition process,

wherein said liquid phase film deposition chamber is provided with a second mechanism for oxidizing an element belonging to Group 1 or 2 of the periodic table,

wherein said second mechanism includes an oxidization cell having a lid and an oxygen gettering agent,

wherein said liquid phase film deposition chamber is provided with a third mechanism for supplying an organic material including solvent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

8. (Currently Amended) A film deposition apparatus according to claim 7,

wherein an inside of one of said transferring chambers is kept under a reduced pressure and said liquid phase film deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric pressure or in a pressurized state.

9. (Previously presented) A film deposition apparatus according to claim 7,

wherein one of said transferring chambers is connected to a calcining chamber through a gate, and said calcining chamber is provided with a mechanism for turning said substrate upside down.

10. (Currently Amended) A film deposition apparatus comprising:

- a stock chamber for loading or unloading a substrate;
- two transferring chambers each connected to said stock chamber through a gate;
- a vapor phase film deposition chamber connected to one of said two transferring chambers through a gate; and
- a liquid phase film deposition chamber connected to another said transferring chamber through a gate,

wherein said liquid phase film deposition chamber is provided with a first mechanism for pressurizing with an inert atmosphere,

wherein said liquid phase film deposition chamber is filled with an inert gas during film deposition process,

wherein said liquid phase film deposition chamber is provided with, via a piping, a second mechanism for oxidizing an element belonging to Group 1 or 2 of the periodic table,

wherein said second mechanism includes an oxidization cell having a lid and an oxygen gettering agent,

wherein said liquid phase film deposition chamber is provided with a third mechanism for supplying an organic material including solvent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

11. (Currently Amended) A film deposition apparatus according to claim 10,

wherein an inside of one of said transferring chambers is kept under a reduced pressure and said liquid phase film deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric pressure or in a pressurized state.

12. (Previously presented) A film deposition apparatus according to claim 10,
wherein one of said transferring chambers is connected to a calcining chamber through a gate, and said calcining chamber is provided with a mechanism for turning said substrate upside down.

13. (Currently Amended) A film deposition apparatus comprising:
a stock chamber for loading or unloading a ~~substrata~~ substrate;
a transferring chamber for transferring said substrate; and
an EL material deposition chamber connected to said transferring chamber through a gate,
wherein said EL material deposition chamber is provided with a mechanism for pressurizing with an inert atmosphere,

wherein said EL material deposition chamber is provided with a mechanism for supplying an organic material including solvent,

wherein said EL material deposition chamber is filled with an inert gas during EL material deposition process,

wherein said EL material deposition chamber is provided with a cell which contains an element belonging to Group 1 or 2 of the periodic table,

wherein said ~~second mechanism includes an oxidization cell having~~ cell has a lid and an oxygen gettering agent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

14. (Currently Amended) A film deposition apparatus according to claim 13, wherein an inside of said transferring chamber is kept under a reduced pressure and said EL material deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric pressure or in a pressurized state.

15. (Original) A film deposition apparatus according to claim 13, wherein said transferring chamber is connected to a calcining chamber through a gate, and said calcining chamber is provided with a mechanism for turning said substrate upside down.

16. (Currently Amended) A film deposition apparatus comprising:
a stock chamber for loading or unloading a substrate;
two transferring chambers each connected to said stock chamber through a gate;
a vapor phase film deposition chamber connected to one of said two transferring chambers through a gate; and
an EL material deposition chamber connected to another said transferring chamber through a gate,
wherein said EL material deposition chamber is provided with a mechanism for pressurizing with an inert atmosphere.

wherein said EL material deposition chamber is provided with a mechanism for supplying an organic material including solvent,

wherein said EL material deposition chamber is filled with an inert gas during EL material deposition process,

wherein said EL material deposition chamber is provided with a cell which contains an element belonging to Group 1 or 2 of the periodic table,

wherein said ~~second mechanism includes an oxidization cell~~ having cell has a lid and an oxygen gettering agent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said ~~oxidation~~ cell is air-tight when said lid is closed.

17. (Currently Amended) A film deposition apparatus according to claim 16,

wherein an inside of one of said transferring chambers is kept under a reduced pressure and said EL material deposition chamber ~~is filled with an inert gas and~~ is kept under atmospheric pressure or in a pressurized state.

18. (Previously presented) A film deposition apparatus according to claim 16,

wherein one of said transferring chambers is connected to a calcining chamber through a gate, and said calcining chamber is provided with a mechanism for turning said substrate upside down.

19-30. (Canceled)

31. (Previously presented) A film deposition apparatus according to claim 1,
wherein said liquid phase film deposition chamber is a chamber for depositing an EL
material.

32. (Previously presented) A film deposition apparatus according to claim 1,
wherein said liquid phase film deposition chamber is provided with a spin coater for
forming an EL layer.

33. (Previously presented) A film deposition apparatus according to claim 1,
wherein said liquid phase film deposition chamber is provided with a nozzle for forming an
EL layer.

34. (Previously presented) A film deposition apparatus according to claim 4,
wherein said liquid phase film deposition chamber is a chamber for depositing an EL
material.

35. (Previously presented) A film deposition apparatus according to claim 4,
wherein said liquid phase film deposition chamber is provided with a spin coater for
forming an EL layer.

36. (Previously presented) A film deposition apparatus according to claim 4,

wherein said liquid phase film deposition chamber is provided with a nozzle for forming an EL layer.

37. (Previously presented) A film deposition apparatus according to claim 7,
wherein said liquid phase film deposition chamber is a chamber for depositing an EL material.

38. (Previously presented) A film deposition apparatus according to claim 7,
wherein said liquid phase film deposition chamber is provided with a spin coater for forming an EL layer.

39. (Previously presented) A film deposition apparatus according to claim 7,
wherein said liquid phase film deposition chamber is provided with a nozzle for forming an EL layer.

40. (Previously presented) A film deposition apparatus according to claim 10,
wherein said liquid phase film deposition chamber is a chamber for depositing an EL material.

41. (Previously presented) A film deposition apparatus according to claim 10,
wherein said liquid phase film deposition chamber is provided with a spin coater for forming an EL layer.

42. (Previously presented) A film deposition apparatus according to claim 10,
wherein said liquid phase film deposition chamber is provided with a nozzle for forming an
EL layer.

43. (Previously presented) A film deposition apparatus according to claim 13,
wherein said EL material deposition chamber is provided with a spin coater for forming an
EL layer.

44. (Previously presented) A film deposition apparatus according to claim 13,
wherein said EL material deposition chamber is provided with a nozzle for forming an EL
layer.

45. (Previously presented) A film deposition apparatus according to claim 16,
wherein said EL material deposition chamber is provided with a spin coater for forming an
EL layer.

46. (Previously presented) A film deposition apparatus according to claim 16,
wherein said EL material deposition chamber is provided with a nozzle for forming an EL
layer.

47 - 52. (Canceled)

53. (Previously Presented) A film deposition apparatus according to claim 1,

wherein said second mechanism includes a heater.

54. (Previously Presented) A film deposition apparatus according to claim 4,
wherein said second mechanism includes a heater.

55. (Previously Presented) A film deposition apparatus according to claim 7,
wherein said second mechanism includes a heater.

56. (Previously Presented) A film deposition apparatus according to claim 10,
wherein said second mechanism includes a heater.

57. (Currently Amended) A film deposition apparatus according to claim 13,
wherein a heater is placed under said ~~second mechanism includes a heater cell~~.

58. (Currently Amended) A film deposition apparatus according to claim 16,
wherein a heater is placed under said ~~second mechanism includes a heater cell~~.

59. (Currently Amended) A film deposition apparatus comprising:
a liquid phase film deposition chamber,
wherein said liquid phase film deposition chamber is provided with a first mechanism for
pressurizing with an inert atmosphere,
wherein said liquid phase film deposition chamber is filled with an inert gas during film
deposition process,

wherein said liquid phase film deposition chamber is provided with a second mechanism for oxidizing an element belonging to Group 1 or 2 of the periodic table,

wherein said second mechanism includes an oxidization cell having a lid and an oxygen gettering agent,

wherein said liquid phase film deposition chamber is provided with a third mechanism for supplying an organic material including solvent,

wherein a period of time in which said oxygen gettering agent is oxidized is adjusted by opening and closing said lid, and

wherein said oxidation cell is air-tight when said lid is closed.

60. (Previously Presented) A film deposition apparatus according to claim 59,

wherein said liquid phase film deposition chamber is a chamber for depositing an EL material.

61. (Previously Presented) A film deposition apparatus according to claim 59,

wherein said liquid phase film deposition chamber is provided with a spin coater for forming an EL layer.

62. (Previously Presented) A film deposition apparatus according to claim 59,

wherein said liquid phase film deposition chamber is provided with a nozzle for forming an EL layer.

63. (New) A film deposition apparatus according to claim 31, wherein said EL material is a high molecular type organic EL material

64. (New) A film deposition apparatus according to claim 13, wherein said EL material is a high molecular type organic EL material

65. (New) A film deposition apparatus according to claim 16, wherein said EL material is a high molecular type organic EL material

66. (New) A film deposition apparatus according to claim 34, wherein said EL material is a high molecular type organic EL material

67. (New) A film deposition apparatus according to claim 37, wherein said EL material is a high molecular type organic EL material

68. (New) A film deposition apparatus according to claim 40, wherein said EL material is a high molecular type organic EL material

69. (New) A film deposition apparatus according to claim 60, wherein said EL material is a high molecular type organic EL material

70. (New) A film deposition apparatus according to claim 31, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene

derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PAni (polyaniline).

71. (New) A film deposition apparatus according to claim 13, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PAni (polyaniline).

72. (New) A film deposition apparatus according to claim 16, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PAni (polyaniline).

73. (New) A film deposition apparatus according to claim 34, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PAni (polyaniline).

74. (New) A film deposition apparatus according to claim 37, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PAni (polyaniline).

75. (New) A film deposition apparatus according to claim 40, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PANi (polyaniline).

76. (New) A film deposition apparatus according to claim 60, wherein said EL material comprises at least one material selected from the group consisting of polyphenylene vinylene derivative, PPV (polyparaphenylene vinylene) derivative, PVK (polyvinyl carbazole) derivative, polyfluorene derivative, PEDOT (polythiophene) and PANi (polyaniline).